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Scientific Research, Editing and Consulting

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25 January 2010

**Committee Secretary
Standing Committee on Industry, Science and Innovation
PO Box 6021
House of Representatives
Parliament House
CANBERRA ACT 2600**

Dear Secretary of the Committee,
(via Email: isi.reps@aph.gov.au)

Re: Inquiry into Australia's international research collaborations

I respectfully submit the following thoughts for your Committee to consider.

These thoughts are based issues which have arisen from my interaction with other scientists at several Australian Universities who wish to study the Australian native rice species.

Yours sincerely,

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TERMS OF REFERENCE:

1. The nature and extent of existing international research collaborations.

At present Australian scientists have limited collaboration with international scientist to study Australian native rice species.

2. The benefits to Australia from engaging in international research collaborations.

The floodplains of northern regions of Western Australian, Northern Territory and Queensland are home to four, maybe more, species of native rice. These rice species have been a food for traditional people and are vital in the ecosystem for native rats and other animals. These rices are related to other grasses which grow in southern Australia but very little is known about them. The actual number of species is in question due to lack of sufficient specimens to identify them.

International scientists, mainly from Japan, have collected specimens of Australian native rices and now hold better collections of them than we do in Australia. In Thailand, genes from Australian rices have been used in a commercial plant breeding program.

Interaction between Australian and international scientists will enable more rapid understanding of the valuable traits and potential of Australian rices as a food source and a reservoir of genes for commercial rice breeders. For example, we would have better links with world experts on rice such as Dr Duncan Vaughan, a long-standing world leader in the science of *Oryza* taxonomy now with FAO in Thailand, who recently described the Australian rice species as “an understudied, strategically important, genetic resources”.

3. The key drivers of international research collaboration at the government, institutional and researcher levels.

There are several researchers at Australian Universities and other organisations -

- Charles Sturt University,
- The University of Sydney,
- Southern Cross University
- Macquarie University,
- Charles Darwin University.
- NSW DPI (Rice Breeders)
- National and State herbaria.

4. The impediments faced by Australian researchers when initiating and participating in international research collaborations and practical measures for addressing these.

In brief, restrictions imposed by State and Territory Governments on collecting native rice samples for scientific purposes discourage research and international collaboration. For example, Australian researchers are disqualified from applying for funds from the Bill and Melinda Gates Foundation because any germplasm used in a project must be freely available to others.

At present, the situation exists whereby it would be easier to import Australian native rice specimens, or go overseas and work with them, than it would be to obtain permission to collect more samples for research purposes.

The current limits on collecting specimens appear to protect the States and Territory from losing control of their plant genes but much more basic, non-commercial work is essential to know what is worthy of protection and how best to capitalise on this resource..

5. Principles and strategies for supporting international research engagement.

I recommend that the Federal Government institute a simple “approval to collect plant specimens” system which encourages Australian scientists to collect specimens of Australian plant species purely for research purposes.

Until we understand the value of these plants we cannot know what we should protect.